

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A resin composition comprising:

- (A) an alkali-soluble resin;
- (B) an infrared absorbing agent; and
- (C) a thiol compound,

wherein a solubility of the resin composition in an alkaline aqueous solution is changed by exposure with an infrared laser beam.

2. (withdrawn-currently amended): A resin composition according to claim 1, further comprising:

- ~~(A) an alkali-soluble resin;~~
- ~~(B) an infrared absorbing agent;~~
- ~~(C) a thiol compound; and~~

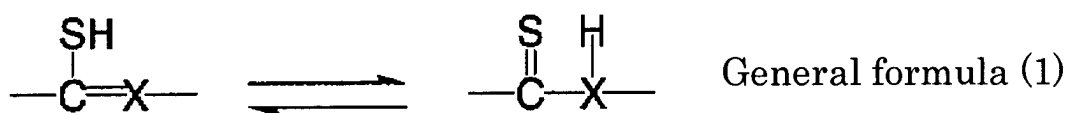
(D) a compound that ~~are~~ is thermally decomposable and substantially reduces a solubility of the alkali-soluble resin in an undecomposed state,

~~wherein a solubility of the resin composition in an alkaline aqueous solution is changed by exposure with an infrared laser beam.~~

3. (withdrawn-currently amended): A resin composition according to claim 2, wherein the compound that ~~are~~ is thermally decomposable and substantially reduces a solubility of the

alkali-soluble resin in an undecomposed state is a compound selected from a group consisting of onium salts, o-quinonediazide compounds, and alkyl sulfonate esters.

4. (original): A resin composition according to claim 1, wherein the thiol compound can tautomerize as shown by the following general formula (1):



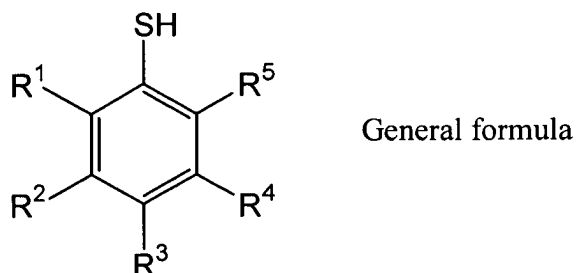
wherein X represents a trivalent atom or atomic group.

5. (original): A resin composition according to claim 4, wherein X in general formula (1) is a nitrogen atom or a methine group.

6. (original): A resin composition according to claim 1, wherein the thiol compound is an aliphatic hydrocarbon having an SH group on a side chain or at a terminal.

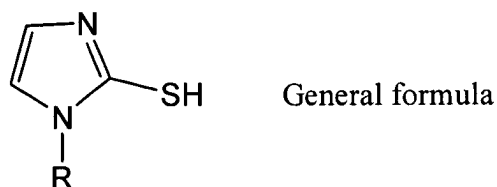
7. (currently amended): A resin composition according to claim 1, wherein the thiol compound is a cyclic hydrocarbon substituted by an SH group or a ~~heterocycle~~ heterocyclic compound substituted by an SH group.

8. (currently amended): A resin composition according to claim 7, wherein the cyclic hydrocarbon substituted by an SH group is a compound represented by the following general formula:



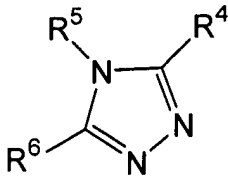
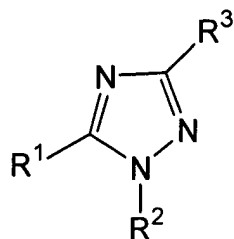
wherein in the general formula, R¹ through R⁵ each independently represent a hydrogen atom, an alkyl group, a halogen atom, an alkoxy group, or a mercapto group.

9. (currently amended): A resin composition according to claim 7, wherein the ~~heterocycle~~ heterocyclic compound substituted by an SH group has two nitrogen atoms in the ~~heterocycle~~ heterocyclic compound and is represented by the following general formula:



wherein in the general formula, R represents a hydrogen atom or an alkyl group.

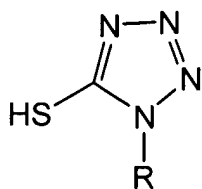
10. (currently amended): A resin composition according to claim 7, wherein the ~~heterocycle~~ heterocyclic compound substituted by an SH group has three nitrogen atoms in the ~~heterocycle~~ heterocyclic compound and is represented by at least one of the following general formulae:



General formulae

wherein in the general formulae, R¹ through R⁶ each independently represent a hydrogen atom, an alkyl group, an aryl group, an amino group, or a mercapto group, at least one of R¹ and R³ represents a mercapto group, and at least one of R⁴ and R⁶ represents a mercapto group.

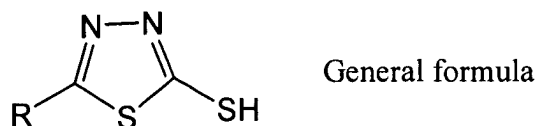
11. (currently amended): A resin composition according to claim 7, wherein the ~~heterocycle~~ heterocyclic compound substituted by an SH group has four nitrogen atoms in the ~~heterocycle~~ heterocyclic compound and is represented by the following general formula:



General formula

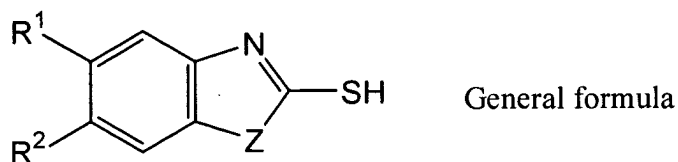
wherein in the general formula, R represent an alkyl group or an aryl group, and when R represents an aryl group, R may represent an aryl group that has a substituent selected from the group consisting of a hydroxyl group, a carbamoyl group, and a carboxyl group.

12. (currently amended): A resin composition according to claim 7, wherein the ~~heterocycle~~ heterocyclic compound substituted by an SH group is a compound represented by the following general formula:



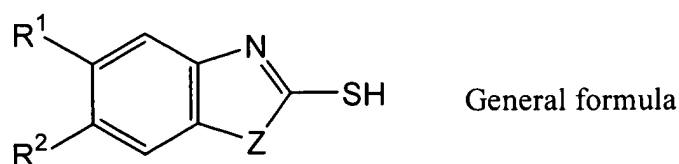
wherein in general formula, R represents an alkyl group, an amino group, an alkylthio group, or a mercapto group.

13. (currently amended): A resin composition according to claim 7, wherein the ~~heterocycle~~ heterocyclic compound substituted by an SH group is a compound represented by the following general formula:



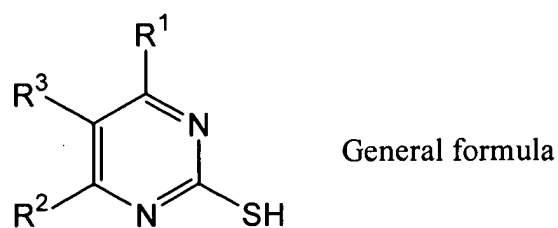
wherein in general formula, R¹ and R² each independently represent a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a carbamoyl group, a nitro group, or a sulfonate group, and Z represents -NH-, an oxygen atom, or a sulfur atom.

14. (currently amended): A resin composition according to claim 7, wherein the ~~heterocycle~~ heterocyclic compound substituted by an SH group is a compound represented by the following general formula:



wherein in the general formula, R^1 and R^2 each independently represent a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a carbamoyl group, a nitro group, or a sulfonate group, and Z represents an oxygen atom or a sulfur atom.

15. (currently amended): A resin composition according to claim 7, wherein the ~~heterocycle~~ heterocyclic compound substituted by an SH group is a compound represented by the following formula:



wherein in the general formula, R^1 through R^3 each independently represent a hydrogen atom, an alkyl group, a haloalkyl group, a hydroxyl group, an amino group, a nitroso group, or a mercapto group.

16. (original): A resin composition according to claim 1, wherein the thiol compound is a compound obtained by substituting an SH group for a substituent on a cyclic hydrocarbon.

17. (original): A resin composition according to claim 1, wherein the thiol compound is contained in an amount of 0.2 to 20% by mass based on a total solids content of the resin composition.

18. (withdrawn-currently amended) A positive-type image recording layer containing a resin composition according to claim 1, ~~comprising:~~

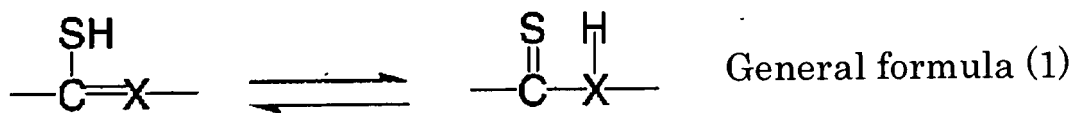
~~A) an alkali-soluble resin;~~

~~(B) an infrared-absorbing agent; and~~

~~(C) a thiol compound;~~

~~wherein a solubility of the resin composition in an alkaline aqueous solution is changed by exposure with an infrared laser beam.~~

19. (withdrawn): A positive-type image recording layer according to claim 18, wherein the thiol compound can tautomerize as shown by the following general formula (1):



wherein X represents a trivalent atom or atomic group.

20. (withdrawn-currently amended): A negative-type image recording layer containing a resin composition according to claim 1, ~~comprising:~~

~~(A) an alkali-soluble resin;~~

~~(B) an infrared absorbing agent; and~~

~~(C) a thiol compound,~~

~~wherein a solubility of the resin composition in an alkaline aqueous solution is changed
by exposure with an infrared laser beam.~~